

REMARKS

Favorable consideration and allowance are respectfully requested for claims 40-46, 48-51 and 79-89 in view of the foregoing amendments and the following remarks.

The rejection of claims 40-43, 45, 46, 48, 49, 51 and 79-86 under 35 U.S.C. § 103(a) over Rossin et al. (6,069,291) in view of Okazaki et al. (5,151,263) and Imamura (5,649,985), is respectfully traversed.

Claims 40, 80, 81 and 83 are amended to recite the step of adding a hydrocarbon. Claim 48 is amended to recite that a hydrocarbon is present. Support for these amendments may be found in the application as originally filed, for instance on page 13, lines 5-10. This text describes that the hydrocarbon can combust on the catalyst, thereby providing the significant advantage of reducing the heat energy that must be supplied to the system.

In the previously-submitted response, the claims were amended to recite the addition of nitrogen gas. As explained, the addition of nitrogen gas provides a number of benefits to the inventive process:

- the overall oxygen content of the reaction atmosphere is reduced, given the additional ambient nitrogen;
- as a result of the reduced oxygen content in the reaction atmosphere (when compared with air), the instance and likelihood of decomposition by combustion is reduced;

- similarly, the likelihood of an oxidative decomposition is reduced, as a result of the reduced oxygen content, and a hydrolysis reaction is more likely to proceed.

The Rossin reference relates to a process where PFC gases are decomposed in air. As explained above, this is significantly different from the invention as presently claimed, where the addition of nitrogen results in a reduced oxygen content and affords benefits including reducing the likelihood of combustion and oxidative decomposition. In accordance with the presently claimed method the desired hydrolysis reaction is much more likely to proceed because the ambient gas is NOT simply air. Rossin, on the other hand, relate to a reactive process that takes place in the presence of air. Thus, Rossin fails to teach or suggest each and every limitation of the present claims.

The recent Office Action argues that Rossin achieves the claimed result through the addition of air. As is evident from the forgoing, Rossin proceeds in a series of steps that absolutely prevent the desired outcome of reducing the likelihood of oxidative decomposition. If one were to add air, as described by Rossin, they would necessarily be adding oxygen, and thus not improving (reducing) the overall oxygen content of the reaction system.

Similarly, the secondary references, Imamura and Okazaki, do make up for the failure of Rossin to teach or suggest the presently claimed invention.

The Okazaki reference is offered as teaching absorption and neutralization by alkali. This reference does not make up for the failure of Rossin to teach the claim limitations discussed above.

The Imamura reference is offered as teaching that HF is water soluble and can be removed by scrubbing with water. This reference does not make up for the failure of Rossin to teach the claim limitations discussed above.

The cited references, when considered alone or in the proposed combination, do not describe the process as presently claimed, nor they describe the advantages afforded by the claimed invention. Accordingly, the proposed combination of reference fails to teach or suggest each and every claim limitation and reconsideration and withdrawal of this rejection are respectfully requested.

The rejection of claims 44, 50 and 87-89 under 35 U.S.C. § 103(a) over Rossin, in view of Imamura or Okazaki and further in view of Rosenbaum (5,460,792), is respectfully traversed.

The Rossin, Imamura and Okazaki references are discussed above. The Rosenbaum reference is offered as suggesting including zinc in the catalysts of Rossin '291, as Rosenbaum allegedly teaches destroying halogenated compounds using a catalyst doped with any of a variety of compounds including zinc oxide. The Rosenbaum reference does not make up for the failure of Rossin to teach the claim limitations discussed above.

Accordingly, these claims are allowable for at least the same reasons that claims 40-43, 45, 46, 48, 49, 51 and 79-86 are allowable over Rossin et al. (6,069,291) in view of Okazaki et al. (5,151,263) and Imamura (5,649,985). In particular, the proposed combination of reference fails to teach or suggest each

and every claim limitation and reconsideration and withdrawal of this rejection are therefore respectfully requested.

Further, Applicants again respectfully request reconsideration of the previously-submitted evidence of unexpected superior results. As discussed in a previously filed reply, that of December 14, 2006, the data in Figure 6 of the Specification and the two Kanno declarations, in combination, shows that Al/Ni catalysts were superior in terms of achieving a high reduction rate when the starting CF concentration was 5,000 pm or higher, and maintaining the high reduction rate for a longer period of time than catalysts containing other elements. This evidence is believed satisfactory to overcome the obviousness assertions.

CONCLUSION

In view of the foregoing, the application is respectfully submitted to be in condition for allowance, and prompt favorable action thereon is earnestly solicited.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

Although a petition for an Extension of Time is submitted herewith, if necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket No. 056203.50311).

Respectfully submitted,

April 9, 2008

/ Christopher T. McWhinney /

Christopher T. McWhinney
Registration No. 42,875

James F. McKeown
Registration No. 25,406

CROWELL & MORING LLP
Intellectual Property Group
P.O. Box 14300
Washington, DC 20044-4300
Telephone No.: (202) 624-2500
Facsimile No.: (202) 628-8844
JFM:CTM

5529584